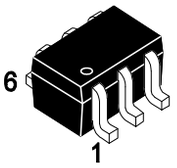
LBAT54TW1T1G
S-LBAT54TW1T1G

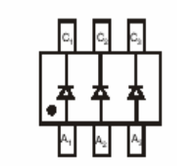
SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAY

1. FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage — 0.35 Volts (Typ) @ IF = 10 mA
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



SC88(SOT-363)



TOP VIEW

2. DEVICE MARKING AND ORDERING INFORMATION

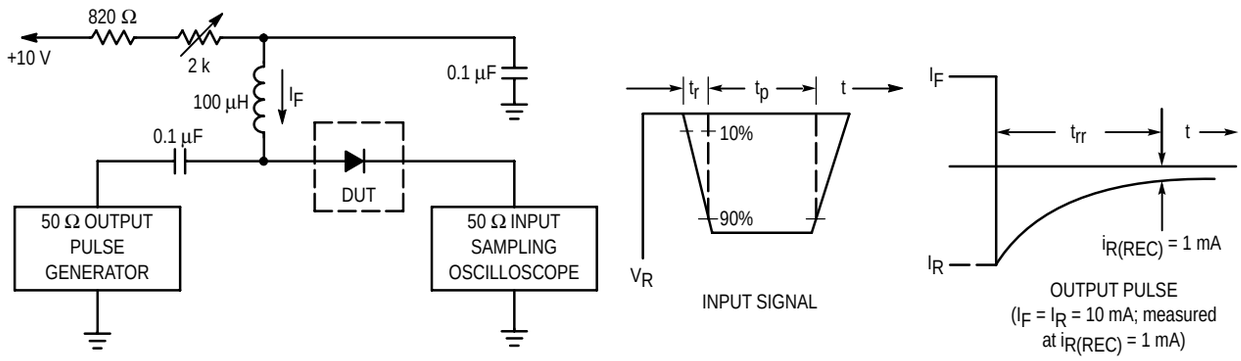
Device	Marking	Shipping
LBAT54TW1T1G	KLA	3000/Tape&Reel
LBAT54TW1T3G	KLA	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Reverse voltage	VR	30	V
Forward Power Dissipation @ TA = 25°C Derate above 25°C	PD	 225 2	 mW mW/℃
Forward Current (DC)	IF	200	mA
Junction temperature	Tj	125	℃
Storage Temperature Range	Tstg	-55~+150	℃

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

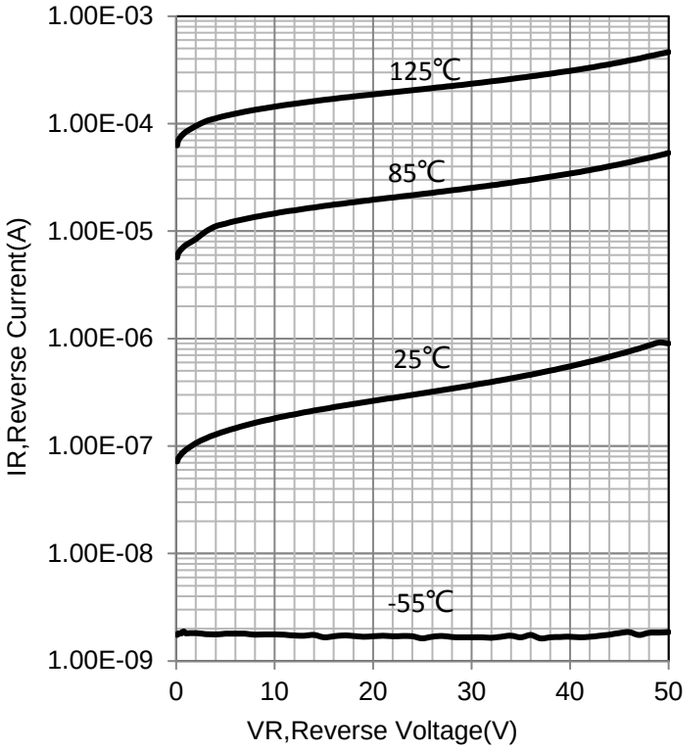
Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage (IR = 10 µA)	V(BR)R	30			V
Total Capacitance (VR = 1.0 V, f = 1.0 MHz)	CT			10	pF
Reverse Leakage (VR = 25 V)	IR		0.5	2	µA
Forward Voltage (IF = 0.1 mA) (IF = 1.0 mA) (IF = 10 mA) (IF = 30 mA) (IF = 100 mA)	VF		 0.22 0.29 0.35 0.41 0.52	 0.24 0.32 0.4 0.5 1	V
Reverse Recovery Time (IF = IR = 10 mA, IR(REC) = 1.0 mA) Figure 1	trr			5	ns
Forward Current (DC)	IF			200	mA
Repetitive Peak Forward Current	IFRM			300	
Non–Repetitive Peak Forward Current (t< 1.0 s)	IFSM			600	



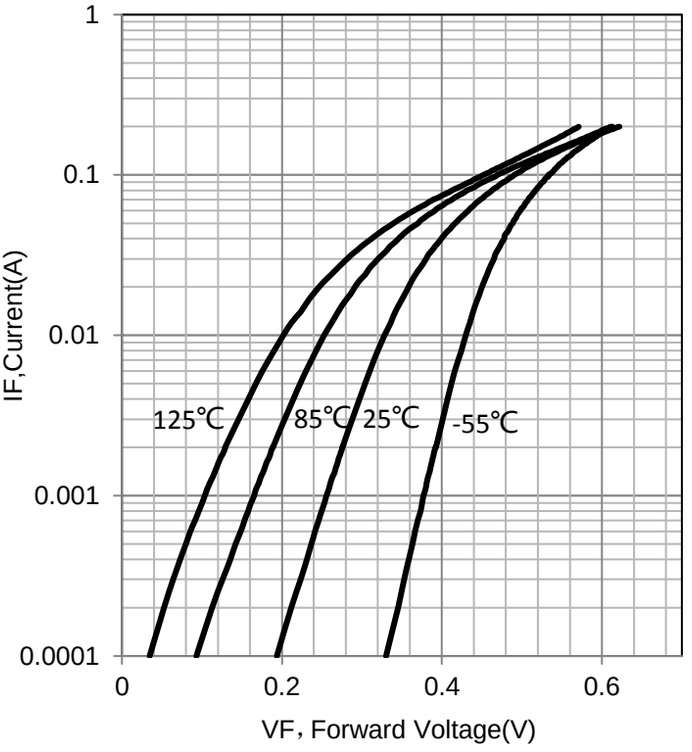
Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10 mA.
3. $t_p >> t_{rr}$

RECOVERY TIME EQUIVALENT TEST CIRCUIT

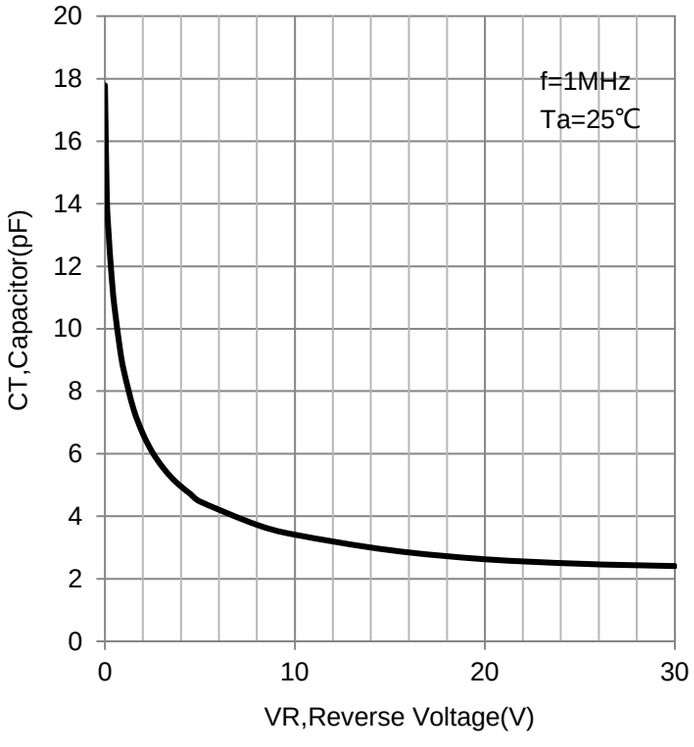
5.ELECTRICAL CHARACTERISTICS CURVES



IR vs. VR

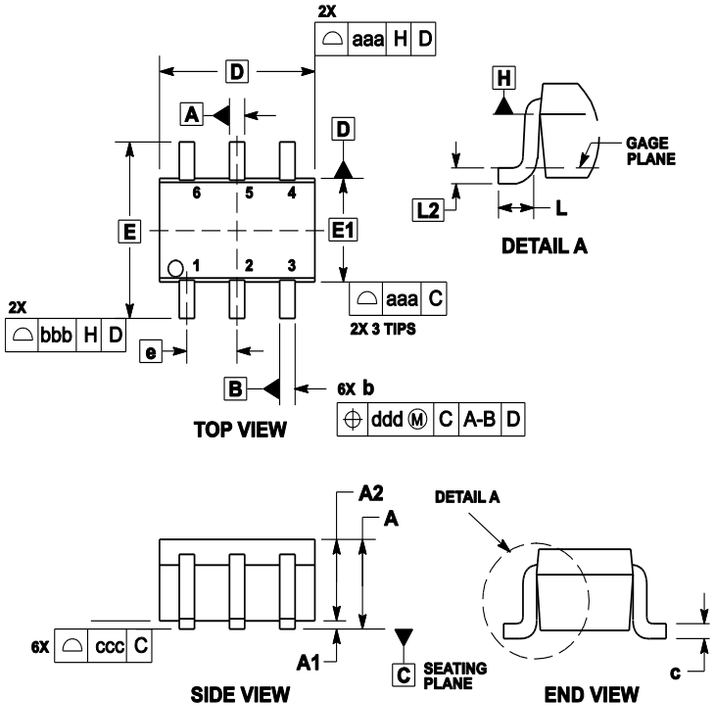


IF vs. VF



CT vs. VR

6.OUTLINE AND DIMENSIONS



Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E1 DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	---	---	1.10	---	---	0.043
A1	0.00	---	0.10	0	---	0.004
A2	0.70	0.90	1.00	0.027	0.035	0.039
b	0.15	0.20	0.25	0.006	0.008	0.01
C	0.08	0.15	0.22	0.003	0.006	0.009
D	1.80	2.00	2.20	0.07	0.078	0.086
E	2.00	2.10	2.20	0.078	0.082	0.086
E1	1.15	1.25	1.35	0.045	0.049	0.053
e	0.65 BSC			0.026 BSC		
L	0.26	0.36	0.46	0.010	0.014	0.018
L2	0.15 BSC			0.006 BSC		
aaa	0.15			0.01		
bbb	0.30			0.01		
ccc	0.10			0.00		
ddd	0.10			0.00		

7.SOLDERING FOOTPRINT